SCHULTE & ASSOCIATES
Building Code Consultants
880D Forest Avenue
Evanston, IL 60202
fpeschulte@aol.com
504/644-8900

STRUCTURAL FIRE FIGHTING AND THE FIRE SERVICE

By Richard Schulte

> "*With the decrease in the number of structural fires, we have ended up with a large number of firefighters/officers that just have not seen many of the situations that our predecessors did. What if you have never been witness to a flashover or pre-flashover conditions, in a live setting? Or never been faced with a commercial fire or fire with occupants?*"
>
> Mark Fowler, Fire Engineering, July 10, 2011

According to statistics included in a report published by the National Fire Protection Association (NFPA) titled, *Fire Loss in the United States During 2009*, written by Michael J. Carter dated August 2010, there were an estimated 1,098,000 structure fires in the United States in 1977. In 2009, the latest year for which data is available from the NFPA, there were an estimated 480,500 structure fires in the US. Over the 33 year period, that's a decrease of 56.24 percent in the annual number of structure fires.

What this tells us is that our fire prevention programs in the United States have been extremely effective, but the raw statistics don't really tell the entire story. It should be noted that this decrease in the number of structure fires has occurred against a backdrop of an increasing population in the US. In other words, the success of our fire prevention programs is even greater than indicated by the statistics cited above.

Not only are there fewer structure fires annually than years ago, but many of the structure fires which occur are far less severe than in the old days, due to the fact that the number of buildings protected by sprinkler systems is increasing. In many instances, fire fighters arrive at the scene of a structure fire where the activation of sprinklers has already extinguished the fire.

Although fewer structural fires means less real world fire fighting experience for fire fighters, the implementation of the recommendations contained in **NIOSH 2005-132**, *Preventing Injuries and Deaths of Fire Fighters due to Truss System Failures*, and **NIOSH 2010-153**, *Preventing Deaths and Injuries of Fire Fighters using Risk Management Principles at Structure Fires*, will mean that fire fighters can still perform their jobs safely. In fact, the NFPA statistics indicate that fewer on-duty fire fighter fatalities occurred in 2010 than in any year since 1977.

Not only are fire fighter fatalities decreasing, but so are civilian fire fatalities in structure fires. Typically, the number of civilian fire fatalities which occur in commercial (non-residential) buildings in the United States is between 100 and 200, with the body count in most years closer to 100.

Quite an accomplishment. Congratulations are in order-now get back to working on reducing the body count ever further, and also reducing the aggregate cost of fire protection in the United States. Doing more with less should be the goal.

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